#### REMARKS

# I. Status of the Application

Claims 17-36 are pending in this application. In the May 4, 2006 office action, the Examiner:

- 1. Rejected claim 23 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite;
- 2. Rejected claims 17, 19, 20, 30, 31, 33 and 35 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,047,274 to Johnson et al. (hereinafter "Johnson"); and
- 3. Rejected claims 18, 21-29, 32, 34 and 36 under 35 U.S.C. § 103(a) as allegedly being obvious over Johnson in view of U.S. Patent No. 6,021,402 to Takriti (hereinafter "Takriti").

In this response, applicant has amended claim 23 to correct an inadvertent typographical error. Applicant respectfully traverses the prior art rejections of claims 17-36 in view of the foregoing amendments and the following remarks.

# II. The Indefiniteness Rejection is Moot

The Examiner correctly noted that claim 23 had an improper dependence on itself.

Claim 23 has been amended to depend from claim 22. It is therefore respectfully submitted that the indefiniteness rejection of claim 23 is most and should be withdrawn.

### III. Claim 17 is Patentable

In the May 4, 2006 office action, the Examiner rejected claim 17 as allegedly being obvious over Johnson. As discussed in the Response to Office Action and Rule 114 Submission dated February 13, 2006 ("RCE Response"), there is no legally sufficient motivation or suggestion to modify Johnson as proposed by the Examiner.

As also discussed in the RCE Response, Johnson fails to disclose a "security analysis function analyzing the energy generation and delivery system under one or more contingency conditions and with a plurality of energy generation units selected for operation, the scheduling of generation and delivery of energy based at least in part on the security analysis function."

As will be discussed below, the Examiner appears to have maintained the rejection without addressing any of the specific arguments on these two points set forth in the RCE Response.

B. Johnson Does Not Disclose or Suggest a Security Analysis of a Plurality of Energy Generating Units Selected for Operation

Johnson fails to teach a security analysis function as claimed. Johnson also does not perform any analysis of contingency conditions for a plurality of selected energy generating units selected for operation. This argument was presented in the RCE Response, and is repeated here for the convenience of the Examiner.

In the rejection, the Examiner stated the following in connection with the "security analysis" limitation of claim 17:

Furthermore, Johnson teaches that the rules of the bidding process specify a condition (contingency) that only those bids for power supply would be considered, which include supply blocks of power of sufficient size to fulfill 100% of the end user's projected requirement (security analysis function).

(May 4, 2006 office action at p.3).

Thus, Johnson teaches *excluding* from selection any bid from an energy generating unit that could not provide 100% of the power requirement. Applicants respectfully submit that the application of "rules of the bidding process" to exclude bids based on a condition *does not* constitute determining a contingency condition for a plurality of energy generating units that have been *selected for operation*.

The bids rejected by Johnson for failing to satisfy the 100% power requirement have never been and are never selected for operation. In other words, if a bid from an energy generating unit is not even considered, the energy generating unit can not, under any circumstances, be considered to be *selected*. By contrast, the claimed invention selects energy generating units to satisfy one or more loads, and *then* generates a security analysis using the combination of energy generating units selected.

Furthermore, nothing in Johnson suggests single *subsystem* that performs any analysis with a plurality of selected energy generating units. The only device that plans for the delivery in Johnson, is the Provider. The Provider does not perform any analysis of other Providers, with the exception of analyzing their bid prices.

As a consequence, the modification of Johnson proposed by the Examiner fails to arrive at a system that performs a "security analysis function analyzing the energy generation and delivery system under one or more contingency conditions and with a plurality of energy

generation units selected for operation, the scheduling of generation and delivery of energy based at least in part on the security analysis function." Accordingly, it is respectfully submitted that the rejection of claim 17 is in error for at least this reason.

## D. No Motivation to Modify Johnson as Proposed

Moreover, there is no motivation or modify Johnson as proposed by the Examiner. However, the Examiner alleges that "it would have been obvious . . . to modify Johnson to include that said energy delivery scheduling system is an energy scheduling subsystem of said energy supply bidding system. . . ." (*Id.*) The Examiner states that the motivation for such a modification is that "it would advantageously allow to integrate said functionalities (bidding for energy supply; selecting the winning bidder; and scheduling the delivery of energy) on one computer platform, thereby allowing to simplify upgrading and maintenance of the system, and save on maintenance cost". Applicant respectfully disagrees and has set forth specific counterarguments in the RCE Response.

In particular, there is no teaching in the prior art that 1) integrating bidding, selecting, and scheduling the delivery of energy on a single computer platform saves maintenance costs, 2) that such integration in the Johnson system, in particular, would save maintenance costs, and 3) if there were savings, that such savings outweighed any negatives such integration.

Thus, the above-quoted "motivation" for modifying Johnson is not a legally sufficient motivation or suggestion to modify Johnson as proposed.

Regarding the integration of the three functions (bidding, selecting and scheduling) onto a single computer platform, the prior art contains no teaching, implicit or express, that the integration of three functions of bidding for energy supply, selecting a winning bidder,

and scheduling would result in simplifying upgrading and maintenance. In fact, the Examiner's allegation appears to be speculation, as it is equally possible that such integration of functions would actually *increase* costs of maintenance.

As an initial matter, the software on the platform having those three functions integrated would be larger than the software on separate platforms that divide up the functions. Upgrading, troubleshooting, and repairing a problem in a larger software package is generally more complex than doing the same in separate, smaller software elements.

Moreover, the integrated functions proposed by the Examiner would require more load on computing resources, because the computing load is not distributed over multiple machines. Thus, integration of the three functions, as proposed by the Examiner, may well not decrease maintenance costs.

Moreover, it is even less clear whether integration of the three functions in the Johnson system in particular would save maintenance costs. The prior art contains no teaching, implicit or otherwise, that the particular bidding, selecting and scheduling operations as taught in Johnson would benefit from integration into a single scheduling subsystem. Johnson very clearly discusses using different computers for bid selection (Moderators) and scheduling (Providers). Even if consolidation of computer functions as a general rule provides some advantages in some circumstances, the prior art does not teach that such consolidation provides any advantages in a system as complex and dynamic as that described in Johnson.

Finally, there is no teaching in the prior art regarding the relative costs of integration of the functions as proposed by the Examiner. Indeed, the prior art provides no teaching regarding either the costs or benefits of such integration. Accordingly, the prior art contains

no teaching or suggestion as to whether there is *any net advantage* to integration of the functions into a single computer platform as proposed by the Examiner. To the contrary, in the case of Johnson, the ability of Providers to be able to schedule energy delivery on their own has advantages. There is no teaching as to whether losing these advantages is worth any savings in maintenance costs, assuming there were any such savings.

These arguments were set forth in the RCE Response, and do not appear to have been directly addressed. As a consequence, it is respectfully submitted that the rejection of claim 17 is in error and should be withdrawn.

### IV. Claim 18

Claims 18 stands rejected as allegedly being obvious over Johnson in view of Takriti.

Claim 18 depends from and incorporates all of the limitations of claim 17. As discussed above, the rejection of claim 17 over Johnson is in error and should be withdrawn. The modification of Johnson proposed in connection with claim 18 does not address the shortcomings of Johnson with respect to claim 17. Accordingly, claim 18 is allowable for at least the reasons discussed above in connection with claim 17.

#### V. Claims 19 and 20

Claims 19 and 20 also stand rejected as allegedly being obvious over Johnson. Claims 19 and 20 both depend from and incorporate all of the limitations of claim 17. Accordingly, for at least the same reasons as those set forth above in connection with claim 17, it is respectfully submitted that the rejection of claims 19 and 20 should be withdrawn.

### VI. Claims 21-29

Claim 21 stands rejected as allegedly being obvious over Johnson in view of Takriti. Similar to claim 17, claim 21 includes a limitation directed to an energy scheduling subsystem that schedules generation and delivery of energy based on *both* the market information *and* information relating the energy generation and delivery system. As discussed above in connection with claim 17, Johnson does not disclose such an energy scheduling subsystem and there is no legally sufficient motivation or suggestion to modify Johnson to include such an energy scheduling subsystem.

Moreover, claim 21 recites a database that includes market information entered by market participants regarding a plurality of generator bids and a plurality of load bids. The same database further includes a model of a transmission network. Johnson does not disclose such a database nor is there any motivation to include such a database in Johnson.

The Examiner relies on Takriti for providing the teaching of storing a model of a transmission network in a database that includes a plurality of generator bids and load bids. The Examiner stated that it would have been obvious to modify Johnson to include a model of the transmission network because "it would advantageously allow to determine an operating schedule for generating units to meet the load at a minimal cost and transmission constraints". Applicants disagree. Johnson does not consider loading or power flow solutions of the transmission network during the settlement of bids. As a consequence, there would be no reason to keep the model of the transmission network and the market participant bids in the same database.

The only way a transmission network model would be useful in Johnson is if Johnson were completely modified to perform power flow solutions during the settlement of bids.

Only after such a modification would it be even reasonable to modify Johnson to include the transmission network model. There is no motivation or suggestion to modify Johnson to perform power flow solutions during the settlement of bids because such solutions are not necessary to carry out the bidding process taught by Johnson. The mere fact that Takriti teaches the usefulness of modeling and power flow solutions in Takriti does not, ipso facto, mean that such modeling and power flow solutions would be useful in Johnson.

Accordingly, there is no motivation or suggestion to completely redesign the system of Johnson perform power flow solutions in its bid resolution process. Thus, there is no motivation or suggestion to includes a model of a transmission network in Johnson. As a consequence, there is no legally sufficient motivation or suggestion to make the combination of Takriti and Johnson proposed by the Examiner in the rejection of claim 21. For at least this reasons, it is respectfully submitted that the rejection of claim 21 is in error and should be withdrawn.

Claims 22-29 also stand rejected as allegedly being obvious over Johnson in view of Takriti. Claims 22-29 depend from and incorporate all of the limitations of claim 21. As a consequence, for at least the same reasons as those set forth above in connection with claim 21, it is respectfully submitted that the obviousness rejection of claims 22-29 are in error and should be withdrawn.

### VII. <u>Claims 30-36</u>

Claim 30 stands rejected as allegedly being unpatentable over Johnson. As discussed in the RCE Response, claim 30 recites an energy transmission rights auction subsystem. The Examiner acknowledged that Johnson fails to disclose any auction of energy transmission

rights. (May 4, 2006 Office Action at p.4). As will be discussed below, even if Johnson were modified as proposed by the Examiner, the resulting device would not include an energy transmission *auction* subsystem, as claimed in claim 30.

In particular, the Examiner proposed the following modification of Johnson:

...it would have been obvious ...to modify Johnson to include that said provider's energy delivery (energy transmission rights) scheduling system is an energy scheduling subsystem of said energy supply bidding system, because it would advantageously allow to integrate said functionalities (bidding for energy supply, selecting the winning bidder, and scheduling the delivery of energy) on one computer platform...

(*Id*.)

It is submitted that even if Johnson were modified as proposed, it would still fail to arrive at the invention of claim 30. In particular, the Examiner only alleges that there would be a transmission/delivery scheduling system. The Examiner *does not* allege modification of Johnson to include an energy transmission rights *auction* subsystem. An auction of energy transmission rights is not merely scheduling energy delivery.

Because the proposed modification of Johnson does not arrive at the claimed invention, it is respectfully submitted that claim 30 is allowable over the prior art.

Claims 31-36 depend from claim 30 and are allowable for at least the same reasons.

# VIII. Conclusion

For all of the foregoing reasons, it is respectfully submitted the applicant has made a patentable contribution to the art. Favorable reconsideration and allowance of this application is, therefore, respectfully requested.

Respectfully submitted,

James D. Wood

Attorney for Applicant

Attorney Registration No. 43,285

Maginot Moore & Beck

Chase Tower

111 Monument Circle, Suite 3250

Indianapolis, Indiana 46204-5109

Telephone: (317) 638-2922